EE 483 – Introduction to Digital Signal Processing

Spring 2007

Course Outline

1. Introduction to Digital Signal Processing
   - Chapter 1 of Text

2. Discrete-Time Signals and Systems in the Time-Domain
   - Sections 2.1 through 2.6, and 2.8-2.9 of Text

3. Discrete-Time Fourier Transform
   - Sections 3.1 through 3.9 of Text

5. Digital Processing of Continuous-Time Signals
   - Sections 4.1 through 4.3 of Text

6. Finite-Length Discrete Transforms
   - Sections 5.1 through 5.11 and 5.13 of Text

7. z-Transform
   - Sections 6.1 through 6.7 of Text

8. LTI Discrete-Time Systems in the Transform Domain
   - Sections 7.1 through 7.5, and 7.8-7.9 of Text

9. Digital Filter Structures
   - Sections 8.1 through 8.6, 8.8 and 8.10 of Text

10. IIR and FIR Digital Filter Design
    - Sections 9.1 through 9.6, Sections 10.1 through 10.3, and 10.5 of Text

11. DSP Algorithm Implementation
    - Sections 11.1 through 11.5 of Text

12. Analysis of Finite Wordlength Effects
    - Sections 12.1 through 12.7, and 12.9, 12.11 of Text